

## R E M A R K S

Reconsideration of the application is respectfully requested based on the following remarks.

In the Office Action, the Examiner rejected claims 84-104. Claims 84-104 have been canceled, herein, without prejudice or disclaimer and applicant reserves the right to prosecute canceled subject matter in a continuing application. New claims 105-121 have been added. Applicant asserts that no new matter has been added. As such, claims 105-121 are currently pending.

### REJECTION OF CLAIMS 84-104 UNDER 35 USC §103(a)

In the Office Action, the Examiner rejected claims 86-104 under 35 U.S.C. 103(a) as being unpatentable over Curry (US Pat. 4,974,929) in view of Pugh (US Pat. 5,736,103). The Examiner stated, “See the appropriate paragraph of the 12/1/03 Office action for the teachings of Curry in view of Pugh.” In the referenced Office Action the Examiner stated, “Curry discloses an optical sensing device which comprises an optical fiber, a reagent matrix attached to one end of the fiber, and a light source and detector communicating with the opposite end of the fiber. The device of Curry differs from the claimed invention in that it fails to specify a housing for engaging the opposite end of the optical fiber with the light source and detector.

However, Pugh disclose a similar hand-held optical sensor which includes a housing for containing the optoelectronics and for communicating the optoelectronics with the reagent matrix. It would have been obvious to one of ordinary skill in the art to provide the device of Curry with a housing in order to contain and communicate the necessary optoelectronics, as per the teaching of Pugh.” Applicant respectfully disagrees in light of Applicant’s new claims presented herein.

Applicant herein presents new independent claim 105. Claim 105 recites, in relevant part, **“...a reagent pad comprising a flat membrane material impregnated with a dried reagent solution that comprises optical properties that change with the quantity of the analyte, said flat membrane material cut in a circular shape with a**

**second diameter matching said first diameter and further comprising a first flat surface for contacting the sample volume and a second flat surface, wherein a size of the sample volume required for testing can be minimized; and...the quantity of the analyte in the minimized size of the sample volume can be measured.**” As can be seen, Applicant claims a reagent pad comprising a flat membrane impregnated with a dried reagent solution. In contrast, the reagent matrix described by Curry, column 3, lines 34-37, is “...a cylindrically shaped element comprising a sheath 11 and end cap 12 defining a cavity filled with an optically active chemical indicator material 13...” The reagent in Curry is contained in a cylinder and not impregnated into a flat membrane. Curry is silent on a flat membrane material containing a reagent material. Furthermore, Applicant claims a size of the sample volume required for testing can be minimized. The device in Curry is intended to be immersed in bodily fluids as is stated in column 2, lines 62-64, wherein it states, “...it is *critical* that, during use, the indicator sleeve tip be *immersed* in the body fluids, as in the fluid flow stream in a catheter...” The device in Curry depends on a large volume of flowing fluid as is presented by a catheter in a living body. Curry teaches away from a sample size that is minimized and the minimized size of the sample volume can be measured, as is claimed by Applicant. Additionally, Applicant claims the flat membrane impregnated with a dried reagent solution is bonded to the optical fiber where Applicant recites, “...means for bonding said second side to said second end...” Since Curry does not disclose a flat membrane impregnated with a dried reagent solution, there is no teaching for bonding this kind of membrane to the optical fiber.

Applicant notes that Pugh teaches a membrane containing a reagent, as is shown in Fig.3 and 4 of Pugh. As can be seen from these figures, the membrane 12 is distanced from the light source 38 and detector 40 and does not use an optical fiber comprising at least one fiber as is claimed by Applicant. Furthermore, Applicant has claimed a diameter of the membrane matching a diameter of the optical fiber, where Applicant recites in the instant claim, “...**said flat membrane material cut in a circular shape with a second diameter matching said first diameter...**” Clearly the membrane of Pugh, shown in the figures, is substantially larger than light source 38 and detector 40.

There is no teaching in Pugh that would allow one skilled in the art to construct the novel membrane as Applicant claims. Additionally Pugh does not discuss minimizing a sample. As discussed above, Applicant claims, “... **wherein a size of the sample volume required for testing can be minimized; and...the quantity of the analyte in the minimized size of the sample volume can be measured.**” Pugh in fact teaches away from a minimized sample where in column 6, lines 31-34, wherein it states, “...it is desirable to accommodate large samples, without dripping. Various designs can serve to retain excess sample. One is shown in FIGS. 12, 13, and 14. It is clear that Pugh teaches that large samples are expected.

For at least the reasons stated above, Applicant does not believe that Curry in view of Pugh renders Applicant’s new claim 105 obvious. Applicant has also herein included new dependent claims 106-111. These claims recite additional features of Applicant’s novel device of claim 105. Applicant respectfully requests the Examiner withdraw the previously stated 35 U.S.C. 103(a) rejections.

Applicant herein presents new independent claim 112. Claim 112 recites, in relevant part, “...**a micro tube comprising a first open end, second end and a first diameter, said first open end receiving an optical probe from the photometrical detector where the optical probe passes through said micro tube to said second end; a reagent pad comprising a flat membrane material impregnated with a dried reagent solution that comprises optical properties that change with the quantity of the analyte, said flat membrane material cut in a circular shape with a second diameter matching said first diameter and further comprising a first flat surface for contacting the sample volume and a second flat surface, wherein a size of the sample volume required for testing can be minimized; and means for bonding said second side to said second end where light from the optical probe impinges on said second side and a reflected light indicating changes in said optical properties is effectively returned through the optical probe to the photometrical detector where the quantity of the analyte in the minimized size of the sample volume can be measured.**” As can be seen in claim 112, Applicant claims a device similar to the device as recited in claim 105 with the optical fiber being replaced

by a micro tube and the optical probe replaces the light transmission function of the optical fiber. Applicant believes that for at least the reasons stated above, Curry in view of Pugh does not renders Applicant's new claim 112 obvious. Applicant has also herein included new dependent claims 113-117. These claims recite additional features of Applicant's novel device of claim 112. Applicant respectfully requests the Examiner withdraw the previously stated 35 U.S.C. 103(a) rejections.

Applicant herein presents new independent claim 118. This claim is directed to an apparatus for a blood glucose self-monitoring system. This apparatus includes a ball-point-pen shaped housing for a photometrical detector and an optical probe in combination with the device recited in claim 112. Applicant recites, in relevant part, **"...an optical probe connected to said photometrical detector where in a first position said optical probe is contained within said housing to protect said optical probe from damage and in a second position a portion of said optical probe extends through said opening;**

**a button on a top of said housing for alternately moving said optical probe between said first and second positions when said button is depressed;**

**a clip attached to an upper portion of said housing for attachment to an article of clothing or other flat surface for securely transporting the apparatus..."** These

features are neither shown nor described in Curry and Pugh. At least for this reason and for at least the reasons given above for claims 105 and 112, Applicant believes that Curry in view of Pugh does not renders Applicant's new claim 118 obvious. Applicant has also herein included new dependent claims 119-121. These claims recite additional features of Applicant's novel apparatus of claim 118. Applicant respectfully requests the Examiner withdraw the previously stated 35 U.S.C. 103(a) rejections.

### **OTHER CITED REFERENCES**

The Examiner also cited other references on PTO Form-892, but did not use these references to reject the claims. As implied by the fact that these references were not used to reject the claims, these additional references do not teach or suggest the features of

Applicant's claimed invention. Thus, it is submitted that all claims are patentably distinct from these additional references.

### **CONCLUSION**

In view of the foregoing, it is respectfully submitted that the new claims presented herein are novel over the cited art and a Notice of Allowance for this application is respectfully requested from the Examiner. If there are any issues remaining which the Examiner believes could be resolved through either a Supplemental Response, an Examiner's Amendment, or otherwise if the Examiner believes that further discussion would expedite the allowance of this application, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

Applicant believes that no extension fees are due in connection with this filing; however, Applicant hereby petition for an extension of time which may be required to maintain the pendency of this case, and for any required fee for such extension or any further fee required in connection with the filing of this Amendment, the Commissioner is hereby requested to notify Applicant of any payment due that is not otherwise paid with this letter.

Respectfully submitted,  
Bay Area Intellectual Property Group, LLC

A handwritten signature in black ink, reading "Ariel S. Bentolila". The signature is fluid and cursive, with the first name "Ariel" and last name "Bentolila" clearly distinguishable.

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